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REMARKS

Claims 1-43 are currently pending in the patent application.

The Examiner has objected to the disclosure due to an informality in the paragraph which begins on page 30. Applicants have submitted an amendment to the cited paragraph herein to correct the typographical error.

The Examiner has objected to the drawings, specifically Fig. 5. Applicants respectfully traverse the objection and request reconsideration thereof. In objecting to the drawing, the Examiner has concluded that the description and figure do not allow "clear understanding of the image...and the meaning of the columns within the image." Applicants have reviewed the description and figure and believe that the meaning of the columns within the image is clearly described on page 23, lines 12-19, wherein it is taught that "[a]ssuming that the data for verification data generation is a public key of source A, and the public key is divided into a plurality of divisions having an equal number of bits in order, from MSB to LSB, then the verification data is represented by the histogram, wherein the horizontal axis

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represents the divisions, while the vertical axis represents the quantity corresponding to each division." Accordingly, the different heights of the "columns" represent the quantity of verification data generated for each division (of bits). As discussed further in the succeeding paragraph starting on page 24 at line 5, a human being must view the histogram and recognize that the heights for the verification data for source A are the same as or different from those on a histogram of verification data for destination B. Since such human analysis is intrinsically inaccurate, the Specification goes on to provide a further check that does not require human visual interpretation. Applicants believe that the Specification adequately explains the illustration and request reconsideration of the objection.

The Examiner has objected to Claim 32 since it has a typographical error including "31" in the first line. Applicants have amended Claim 32 to remove the objectionable number.

The Examiner has rejected Claims 9, 11, 21 and 23 under 35 USC 112 as being based on a disclosure which is not enabling. The Examiner concludes that "the above limitation does not allow to determine (sic) how the Kc is derived,

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whether it is delivered encrypted with Kp, whether some other data is sent which allows personal computer of each user to derive the Kc or whether some other mechanism is employed for the personal computer to obtain the identical Kc." Applicants respectfully assert that the Specification provides enabling disclosure at page 22, lines 10-24 and that the claims, as amended, recite that enabling material.

The Examiner has rejected many of the claims under 35 USC 112 as indefinite. Applicants have introduced amendments to the claims to address all of the concerns raised by the Examiner in paragraphs 9-19 of the Office Action.

The Examiner has rejected Claims 1, 4-7, 13, 17-19, 25, 28-32, 36-37 and 43 as anticipated under 35 USC 102 by Vainio and "inherent" teachings with regard to recited claim features. The Vainio reference teaches security measures for Bluetooth communications. Under the Vainio method, a "verifier" device sends a random number to a claimant device, whereupon the claimant device applies a function to the random number to generate a "SRES" response which is sent to the verifier. At the verifier device, the received SRES is compared to a locally-calculated SRES'. Applicants respectfully assert that the Vainio reference does not

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anticipate the invention as now claimed. First, the Vainio reference does not teach that two send/receive devices generate verification data and send that data to their respective output devices, after which the data are compared. Rather, Vainio requires that one device act as the verifier, to send the random number, receive the SRES, and perform the verification. Further, Vainio does not teach or suggest that a plurality of verification data values be generated and compared for mutual matches, as is claimed. While the Examiner seeks to analogize successive iterations of Vainio interactions to the claimed invention, Applicants respectfully assert that the generation of a plurality of verification data, for example for data having a plurality of divisions (see: page 23, et seq), is neither taught nor suggested (independent Claims 1, 13, 25, and 30-41, as well as the claims which depend respectively therefrom). Further, there is nothing in Vainio which teaches or suggests the means or steps for defining a function as an operator, establishing a serial sequence of operators, and letting an input to the serial sequence of operators be the data for verification (claims 4, 6, 16, 18, and 28). Applicants further assert that Vainio does not teach or suggest the means for applying and the steps for

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applying second generation algorithms, in addition to the first generation algorithms, to accomplish the claimed verification (Claims 9-12, 21-24, 33, and 38-41).

The Examiner has concluded that it is inherent in Vainio that the SRES values be placed in verification data output sections. Applicants respectfully assert that Vainio makes no mention of any output sections. Absent some teaching, it cannot be concluded that Vainio teaches or inherently includes such a feature. Applicants suggest, for example, that the verifier of Vainio could calculate the SRES' and compare it to SRES without ever "outputting" the SRES' value. Accordingly, inherency cannot be relied upon for the rejection.

It is well established under U. S. Patent Law that, for a reference to anticipate claim language under 35 USC 102, that reference must teach each and every claim feature. Since the Vainio reference does not teach steps or means as claimed, it cannot be maintained that Vainio anticipates the invention as set forth in the independent claims, Claims 1, 11-13, 25, and 30-41, or the claims which depend therefrom and add further limitations thereto.

The Examiner has rejected Claims 2, 3, 14, 14, 26 and 27 as unpatentable over Vainio, with "official notice" being

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taken with regard to recited claim features. Applicants rely on the interpretation of Vainio presented above and will not repeat the arguments with regard to the Vainio teachings. Applicants will, however, dispute the Examiner's conclusions that Vainio in view of "official notice" obviates the invention as claimed. While audio and visual prompts ("enter password now") and messages ("password not valid") may be known, Applicants contend that such prompts are not the same as nor suggestive of audible or visual verification data per se. Display of verification data is not known. What the Examiner parenthetically notes is a Windows message generated in response to entry of an invalid password; however, Windows does not display verification data (see: e.g., Fig. 5 of the present specification). Clearly, therefore, the obviousness rejections cannot be maintained.

The Examiner has rejected Claims 8 and 20 as unpatentable over Vainio in view of Schneier; and Claims 9-12, 21-24, 33-35 and 38-42 as unpatentable over Vainio in view of Davis, Narayanaswami and Lin. Applicants again rely on the interpretation set forth above with regard to the teachings of the Vainio reference. Applicants respectfully assert that, even if one were to modify Vainio with

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teachings from the additionally cited references, one would not arrive at the invention as claimed. Since none of the cited references teaches or suggests means and steps for generating a plurality of verification data with first generation algorithms, for comparing the plurality of verification data, for defining functions and sequencing operators, for applying second generation algorithms, it cannot be maintained that the combination of references obviates the invention as claimed.

Based on the foregoing amendments and remarks, Applicants respectfully request entry of the amendments, reconsideration of the amended claim language in light of the remarks, withdrawal of the rejections, and allowance of the claims.

Respectfully submitted,

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